



INTERCOM

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January/February 1999

ARA Town Hall Meeting



Steve addresses the group

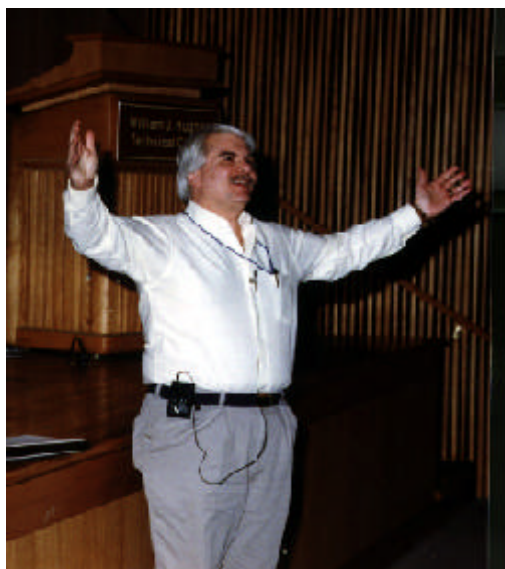
briefings on GPS/WAAS, the Flight Program, Human Factors in Acquisition, the Tech Center's labs, and Y2K testing.

On February 3, Steve Zaidman and Dennis DeGaetano had a town hall meeting with ARA employees. They met one-on-one with employees in the morning, and in the afternoon held an all-hands meeting in the Tech Center auditorium.

While at the Tech Center, Steve and Dennis dedicated two new facilities: the Security Operations Center and the Full-Scale Aircraft Structural Test and Evaluation Research Facility. They also visited the National Airport Pavement Test Facility, which will be dedicated on April 12. They also had



Paul Polski before the 'Hush Kit'?



Dennis hopes the budget grows this big!



Touring the new pavement test facility

The Man Behind the Mail

(The Tech Center mailroom recently made the switch from being a contractor operated facility back to being run by government employees. The following is a profile of one of the new crew, Mr. Larry Michael . . .)



After the conversion of the Tech Center mailroom operation from contractor to government, it was hard to imagine that anyone could make sense of the vast responsibilities associated with the large workload.

The mail room serves not only the Technical and Administrative (T&A) complex but a large number of outbuildings and tenant organizations spread over several square miles. There is also a dizzying array of services provided by the operation, from regular US Mail and internal Government (yardmail) pieces to commercial (e.g., Fed-Ex, UPS) packages and mail service and secure parcels related to civil aviation security.

Larry Michael is a lifelong resident of the Absecon area, right in the Tech Center's back yard. Big brother Robert Michael is a 40-year Tech Center veteran in the Photography Section. When Larry applied for a job with the new, federal mail operation, he probably got more than he bargained for. On Friday, the contract personnel left and Larry started Monday with a limited idea of what needed to be done. Under the apt supervision of Robert Mast and Butch Dansby of the Communications Management Division (ACT-70), Larry quickly "got his legs" by staying calm and persevering in the confusing new atmosphere.

Generally, when transitions of this kind transpire in the government workplace, some level of disruption is expected. This was hardly the case when Larry and co-workers Terry and Tina took over. The flow of mail and packages continued unabated with a minimal amount of confusion.

abated with a minimal amount of confusion. Complex procedures were learned and followed and the Division received a minimal amount of negative feedback regarding the change. Center employees quickly became used to the new team, with their positive attitudes and dependable performance. In fact, Larry has become a common, and comfortable, sight in the Center's new mail vehicle, a Grumman step van painted in Tech Center livery. He greets each customer on his route with the same friendliness and courtesy we are used to at the mail room window.

Next time you see a guy coming with a basket full of your precious correspondence or your latest copy of *Intercom*, take a minute and say hello to Larry Michael, Tech Center mailman.

Crystal Mittelhauser Farewell

On January 26, approximately 70 friends and colleagues of Crystal Mittelhauser bid her farewell at a lovely luncheon held at the Gourmet Italian Cuisine Restaurant in nearby Galloway Township, NJ.

Tom Poussart (AOS-420) served as Master of Ceremonies for the event, which was coordinated by Stephanie Bagot and Kellie Fitzgerald. Michele Tennant-Marcucci (AOS-530) sang a beautiful song in tribute of her friend. Crystal received two special goodbye gifts: a photo album of all of her friends with their personal messages and a framed photo of the Technical Center's 40th anniversary.

Crystal's FAA career has spanned nearly 10 years from her days at Headquarters to her current position as Administrative Officer/Training Coordinator of AOS-400. She is the wife of former AOS-310 Manager, Carl Mittelhauser, who was recently named the Manager of the Columbia, Missouri, AFSS.

Crystal will be tending to the family farm in Missouri where she and Carl will have their four children and six grandchildren nearby. She has been a friend to many and we will miss her.



Pilot Compensation Plan Update



1999 Pay Increases

The Administrator announced on November 13th that she would approve a 1999 general increase for the agency that would match the 3.1% increase granted for the rest of the federal government. The locality increase for the Technical Center is an additional 0.60%. For Technical Center employees who are not covered by the ARA pilot compensation program, the total increase will be 3.7%, effective the pay period beginning January 3.

The Administrator also approved the Organizational Success Increase (OSI) for ARA employees participating in the pilot compensation program, based upon ARA's success in achieving its goals for the FY 98 performance year. For 1998 only, all employees in the compensation pilot received a 3.1% OSI increase. All eligible employees under the new plan received an additional increase of 0.76%, plus the locality pay increase. Thus, Technical Center employees in the compensation system received a total increase of 4.46%. The OSI increase for employees in the compensation plan became effective with the pay period beginning December 20th, which showed up in paychecks received January 12th. The additional locality pay increase became effective January 3.

New Pay Band Adjustments

The FAA conducted a compensation market survey this fall to make sure our pay ranges were competitive with similar work in the private sector. This survey covered a broad number of jobs to which the FAA has been able to match its occupational series. The surveyed companies include a significant representation of the aerospace and airlines industry.

The Core Compensation Committee analyzed the results, and recommended approval of the adjustments to the pay bands to the Administrator, who approved them effective December 20, 1998. As a result, the maximum and minimum for each of our bands have increased, reflecting the changes in

the comparative job market.

Please note, changes in pay band ranges do not affect the individual base salary of employees. Individual salaries increase only by receiving the OSI and Superior Contribution Increase (SCI). However, a few employees, whose base salaries fell below the new pay band minimum, had their salary raised to the new minimum of the band to keep their salary competitive with the market.

Over-the-Maximum Pay

Under the FAA Core Compensation Plan, employees who are paid at or above the maximum of their pay band are only eligible to receive a lump sum payment for both the OSI and the SCI (when awarded), for that portion of their base pay over the maximum. However, for the pilot period only, the FAA Compensation Committee approved a "grandparenting" policy that allows ARA employees who are at or above the maximum band to continue to receive base pay increases instead of lump sum payments.

SCI Process for FY 1999

The SCI is the base pay increase for the top-performing, superior contributors. The first ARA SCIs will be awarded in the December 1999-January 2000 timeframe. Each directorate will identify the top 15% of its employees to receive the SCI.

The ARA Management Team selected the SCI criteria to be used for assessing employees in a "shadow" process, to be conducted around March 1999, and the process for FY 99 performance year. Options in one part of the process allows directorates to conduct assessments somewhat differently. ARA will use paired comparisons to determine the top 15% of employees within each directorate.

All managers will participate in the shadow process using the FY 98 performance data. This will be a test of the process and criteria only, and

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will not result in an actual SCI award. At the conclusion of the shadow, an evaluation will be conducted, and ARA may refine or revise the criteria and/or the process. The final SCI process, which will take place around October or November, will then be used to determine the top contributors for the FY 99 performance year.

SCI Criteria for FY 1999

Impact on organizational success: The extent to which the employee exhibited success in setting priorities and accomplishing work that directly impacted the ability of the organization (branch, division, directorate, ARA) to meet its performance objectives and deliver high quality products/services.

Productivity: The extent to which the employee exceeds expectations in efficiently and effectively using available time and resources to provide consistently high quality service/products in a timely manner

Team behavior: The extent to which the employee demonstrates behavior that contributes to successful team/work group performance. Examples include: obtaining and sharing mission-critical information with other team members; providing leadership for the team that directly contributed to successful mission accomplishment; facilitating team processes that enable the team to function more effectively in performing its mission.

Performance vs. Job Expectations: The degree to which the employee's past performance exceeds job performance expectations for an employee in a similar position with the same level of experience

If you have any questions about the compensation plan please contact the Employee Hotline on cc: Mail at 9-AWA-ARA-Employee Information Updates.

Y2K End-to-End Testing



Cheryl White and Bill Hoffman

After over a year of planning and coordination, NAS Level Y2K End-to-End (ETE) testing is currently being conducted at the William J. Hughes Technical Center under the leadership of Jim May from the Leesburg ARTCC and Cheryl White (ACT-200). Bill Hoffman, AOS ETE Test Coordinator, and Adam Greco, Target Generation Facility Manager are assisting them.

The purpose of the NAS Level Y2K ETE testing is to ensure that NAS system components will not be affected by the two-digit millennium date change and will not compromise air traffic safety during the rollover at midnight, December 31, 1999. In addition, tests will identify potential problems when messages are sent through multiple systems interfaces.

There are three distinct sets of NAS Level Y2K ETE tests needed to achieve the Y2K goal of multiple systems interface testing: the Operational Demonstration, System Integrity Testing, and Field Site Testing. The Operational Demonstration emulates the Oakland ARTCC airspace and utilizes Oakland area Air Traffic Controllers to validate system functionality. System Integrity Testing is conducted in 3 phases

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Comings and Goings

(Through January 31, 1999)

Retirements

Ruth J. Farrell	ACT-71
Robert W. Kennedy	AOS-420
Crystal Mittelhauser	AOS-400
Lather W. Powell, Sr.	ACT-600
Edward F. Quinn	AOS-610A
Richard C. Ridgway	ACT-510
Larry E. Sanders	AOS-520
Jerome P. Smith	AAR-510
Thomas C. Wisser	ACT-360

Promotions and Reassignments

Vira L. Akridge	AOS-620
Troy L. Barr	AOS-620
Christopher M. Carboy	AOS-330
Richard T. Chang	ACT-74
Robert O. Chapman	AOS-540
Christina M. DeFrancesco	AOS-410
Jerome C. Deibel	ACT-411
Truoc N. Dinh	AOS-340
Kelley Drewes	ACT-10
Joette M. Feeney	AOS-600
Lisa A. Ferrante	ACT-051
Howard J. Fleisher	AAR-520
Christine M. Gerhardt-Falk	ACT-520
James J. Gorman	AOS-420
Susan F. Hallowell	AAR-520
Lisa S. Hartz	ACT-10
Christine M. Hoffman	AOS-310
Gene A. Holmes	AOS-430
Ky M. Huynh	AOS-410
Karen L. Jost	ACT-9
Bruce W. Kinsler	AOS-620
Katherine Lugo	ACT-400
Margaret E. Mack	ATQ-1
Wayne F. Marks	ACT-612
Roy H. Mason	AAR-520
Jeanne M. Miller	ACT-412
Margaret R. Myers	AOS-640
James E. Nigro	AOS-420
Roberto R. Ortiz	AOS-410
Betty A. Pallante	ACT-32
Carol Pisano	ACT-340
Nancy E. Proctor	ACT-340
Chinita Roundtree-Coleman	ACT-200
Brian J. Ruf	AOS-410
Kevin N. Shimp	AOS-430
Barbara K. Smith-Horn	ATQ-1
Peter L. Sparacino	AAR-201
William W. Stalvey, Jr.	AOS-620
Carol G. White	AOS-620
Shelley J. Yak	ACT-550



Headquarters Headlines

FAA Names Chief Information Officer.

On January 5, Administrator Jane Garvey named Daniel J. Mehan as the

agency's new Chief Information Officer (CIO). Reporting directly to the administrator, Mehan will serve as the principal FAA advisor on information technology and will direct strategic planning activities for information technology across the agency.

Slater, Garvey Dedicate 21st Century Air Traffic System.

On January 20, Transportation Secretary Rodney E. Slater and FAA Administrator Garvey dedicated a new, first-of-its-kind air traffic control system. The new Display System Replacement (DSR), located at the FAA's Seattle Air Route Traffic Control Center in Auburn, WA, replaces 20 to 30 year old equipment at the center with upgraded displays, computer hardware, and software. It also provides a platform for future upgrades that will increase productivity and help cut costs for the airlines and other aviation users by making the system more efficient.

FAA Revises Wide Area Augmentation System (WAAS) Schedule.

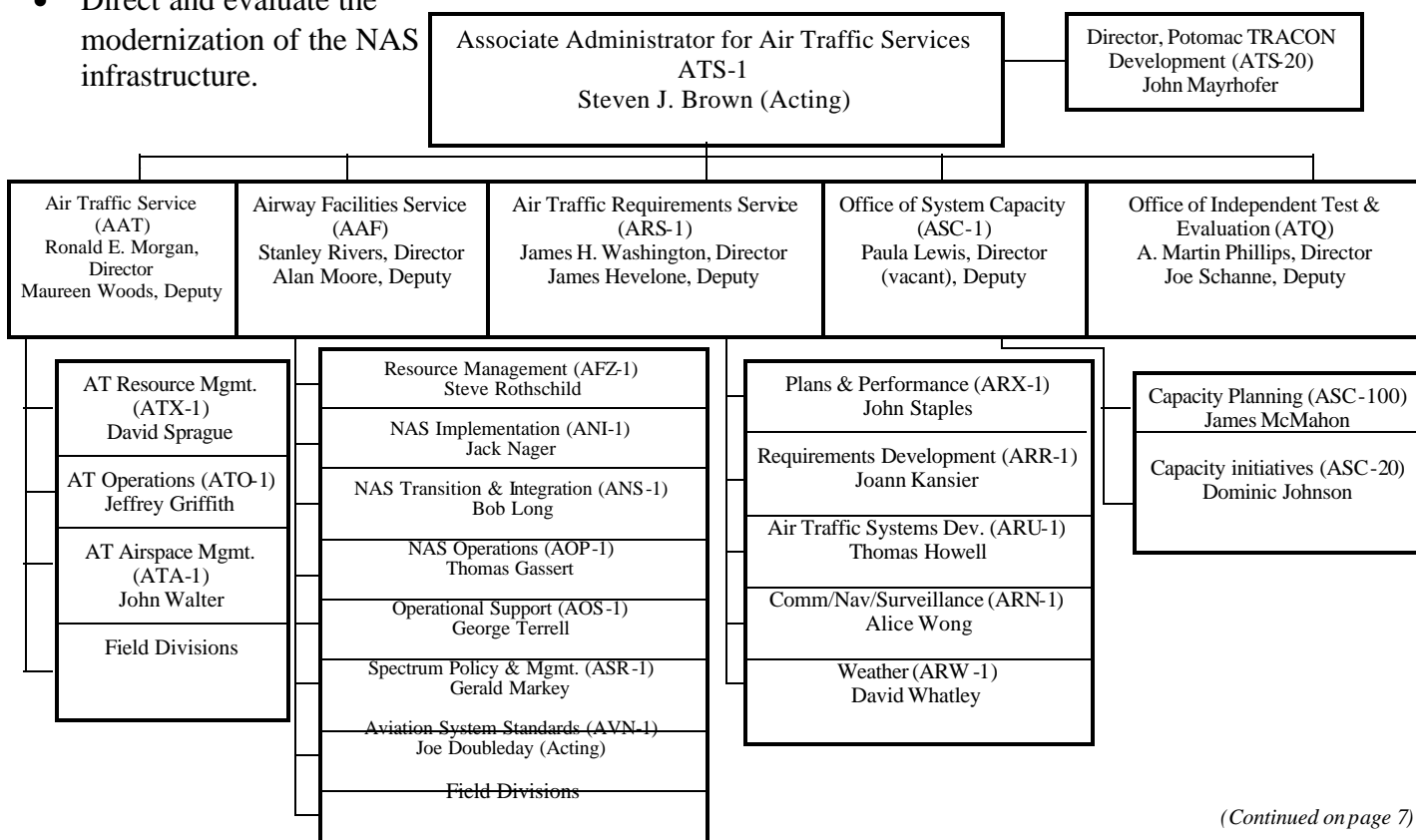
On January 5, the FAA announced that it is revising the implementation schedule for the Wide Area Augmentation System (WAAS) to allow more time to complete development of a critical software safety package that monitors, corrects and verifies the performance of the WAAS. The original July 1999 commissioning date for Phase 1 of WAAS has been rescheduled to September 2000. WAAS is an augmentation to the Global Positioning System (GPS) that corrects the GPS standard civil signal to provide the accuracy, integrity, and availability needed for civil aviation navigation.

GETTING TO KNOW ATS

Did you know that over one-third of the FAA employees located at Atlantic City are in the Air Traffic Services (ATS) organization? They can be found providing secondary NAS maintenance in AOS, conducting IOT&E in ATQ, or controlling aircraft from the Atlantic City Tower. ATS is the largest Line of Business in the FAA. The Acting ATS Associate Administrator, Steven J. Brown, is responsible for a 36,500-employee organization with an annual budget of 6.2 billion dollars per year. (To put the size of ATS into perspective, remember that the total FAA workforce consists of approximately 48,000 employees.)

The mission of the Air Traffic Services organization is to ensure the safe and efficient operation, maintenance, and use of the air transportation system today and meet tomorrow's challenges to increase system safety, capacity, and productivity. ATS consists of men and women who work as air traffic controllers, engineers, systems specialists, pilots, flight inspection personnel, procedures development specialists, business managers, accountants, administrators, managers, secretaries, and support. ATS employees:

- Control over 200,000 aircraft takeoffs and landings per day;
- Provide 24 hours of air traffic control daily;
- Manage the National Airspace System (NAS) infrastructure by operating and maintaining 38,000 facilities/systems;
- Maintain 11,000 terminal instrument flight procedures, adding 500 GPS per year and 9,000 airway segments;
- Annually conduct over 11,000 flight inspections nationally and internationally to preserve the safety, quality, and reliability of the airspace system;
- Assign and protect more than 50,000 aeronautical radio frequencies used in air traffic control;
- Direct and evaluate the modernization of the NAS infrastructure.



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To provide these services and activities, the ATS Line of Business incorporates the offices of Air Traffic, Airway Facilities, System Capacity, Independent Operational Test and Evaluation, and the Systems Requirements Service into a single organization—one that integrates all core elements of the air traffic control system.

Increased operational demand, the diversity of aircraft, changing technology, and globalization of the airline industry present ATS with challenging opportunities. ATS is committed to providing the leadership in business decisions necessary to address the task of assuring a safe, reliable, and efficient air traffic control system.

Helping Controllers "See" Better



The FAA began controller visual scanning research after an Administrator's task force in 1987 highlighted the importance of scanning in effective controller performance. The task force noted that controllers who make systems errors often state afterwards that they did not see something that they should have seen.

This is the fourth experiment within the visual scanning research program. A better understanding of how controllers scan for and process information will help the FAA provide guidance in the development of future human-machine interfaces and decision support tools.

In the current study, sixteen active full

performance level (FPL) air traffic control specialists (ATCSs) work traffic in a simulated generic Terminal Radar Approach developed at the Research and Development Human Factors Laboratory. The Air Traffic Control (ATC) simulation is a high fidelity interactive system that includes ATC communication and simulation pilots serving as aircraft crews.

This study investigates how different levels of task load and different types of conflicts affect air traffic controller performance. The laboratory has integrated the ATC simulator and eye movement data. This study compares visual scanning behavior, system activity, performance, workload, and pilot-controller interactions of the controllers under conditions that differ in traffic load and stage and type of pending conflicts.

The final week of data collection took place at the beginning of December. Data reduction and analysis of the vast amount of collected data will take 3-4 months. This type of research generates a very large volume of data. A one-half hour simulation can produce, for example, about 3,000 lines of visual scanning information. The final technical report is expected in the second half of 1999.

oops!

The last issue of *Intercom* mistakenly identified the Office of Air Traffic Systems Development (AUA) deputy director as Bob Voss. The real deputy is Bill Voss.

Who Is This ACT Manager????

Every month *Intercom* plans to feature an ACT manager. Can you guess who this month's mystery manager is? You can find the answer on page 15!

Number of years in the government? *28 1/2.*

What's the best thing about your job? *I have the opportunity to affect a positive change to the work environment.*

The worst thing? *Sometimes people think if they disagree with reality they can somehow change it. In other words denying something doesn't exist doesn't make it go away.*

Why do you like working at the Tech Center? *The overall work environment is great.*

Life before the Tech Center? *Automation specialist, Indianapolis FSDPS.*

Smartest career move? *Coming to the Tech Center.*

Not so smart career move? *I was totally unprepared for my 1st GS 14 tech lead job interview.*

Favorite vacation spot? *I don't have one.*

Hobbies? *Reading, weight lifting, and playing with my playstation.*

Last book read? *The Seventh Gate by Margaret Weis.*

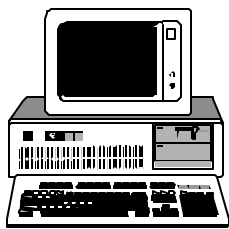
Magazines read? *Crisis, Handyman, Reader's Digest, Golf Digest, Food & Wine, Discover.*

Proudest moment? *It will be when my youngest child graduates this May from Norfolk State College with a B.S. in Accounting and when I graduate this May from Thomas Edison with a B.S. in Applied Science and Technology.*

Answer on page 15

Government Owned Property, Not Business as Usual

The Logistics Division (ACT-50) is changing how it does business with regard to Government Owned Property. A recent Appraisal and Planning Staff (ACT-4) study provided ACT-50 with an evaluation of the Tech Center's process for accountable personal property management.

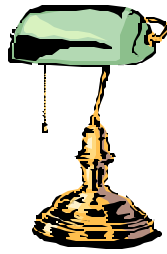


In its efforts to improve the Technical Center's management of Government Owned Property and to carry out the report

recommendations, ACT-50 will provide a series of articles that provide useful information to the Technical Center community concerning Government Owned Property.

Acquisition Management System (AMS) Clause 3.10.3-1 Definitions provides definitions for Government Property terminology. The AMS defines Government property as "all property owned by or leased by the Government or acquired by the Government under the terms of the contract. It includes both Government-furnished property (GFP) and Contractor-acquired property (CAP)."

GFP is defined as "property in the possession of, or directly

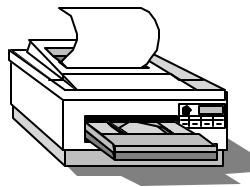


acquired by, the Government and subsequently made available to the Contractor."

CAP is "property acquired or other wise provided by the Contractor for performing a contract and to which the Government has title."

Personal property is "property of any kind or interest in it, except real property, records of the Federal Government, and naval vessels of the following categories: battleships, cruisers, aircraft carriers, destroyers, and submarines."

The ACT-4 study conducted a random sample inventory of property in-use by various organizations at the Technical Center. The sample inventory included three personal property items that the contractor employees said belonged to the contractor. These contractor-owned items are being used on-site rather than as GFP. Because the property is in Technical Center space and not otherwise identified, one may reasonably assume the property belongs to the Government. The evaluation team found numerous personal property items being used by contractors and not identified as Government property.



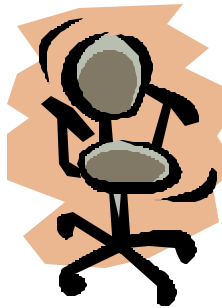
ACT-50 is currently conducting a special inventory to ensure that all Government owned in-use accountable personal property is bar-coded. To avoid

any confusion, contractors are encouraged to mark all contractor-owned personal property with an identifier of contractor ownership when such personal property is utilized on-site at FAA locations. The markings should be securely affixed to the property, legible, and conspicuous. Examples of appropriate markings include bar coding, decals, and stamping. Contractors are also encouraged to notify their Contracting Officer's Technical Representative (COTR) when contractor-owned property is brought on-site at the Technical Center.

The Office of Acquisitions, Quality Assurance Division, Industrial Evaluation and Contract Support Branch (ASU-210) has published a Contractor's Guide for Control of Government Property. The guide will help you understand the basics of FAA property administration. It provides necessary information and guidance to contractors in administering government property under FAA contracts.

Both the Contractor's Guide and the AMS Clauses are accessible at the FAA homepage. Point and click at "FAST.FAA.GOV," "Toolsets," "Procurement Toolbox and RE Guidance."

Stay tuned for more property information. For additional information, contact Melissa French-Gates via cc:Mail.





Airport Pavement COE Student Honored by DOT

At a reception hosted by the Research and Special Programs Administration (RSPA), on January 11, Mortimer Downey, Deputy Secretary of the Department of Transportation (DOT), presented 22 Student of the Year Awards.

This award honors the most outstanding students from participating University Transportation Centers (UTC) for his or her achievements and promise for future contributions to the transportation field. Traditionally, awardees have been affiliated with the UTC program administered by RSPA.

This year, in the spirit of "One DOT," the Department for the first time also honored Bill Vavrik, an awardee from the Air Transportation Centers of Excellence (COE), sponsored by the FAA and AAR-400.

Bill is a doctoral student at the University of Illinois working under Dr. Barry Dempsey, Director, Center of Excellence in Airport Pavement Research, located at the former Chanute Air Force Base, Rantoul, Illinois. He received his B.S. in Civil Engineering from the University of Illinois Urbana-Champaign (UIUC) in 1995. While pursuing his bachelor's degree, he worked for the Illinois Department of Transportation as a cooperative education student engineer.

In 1997, Bill received his M.S. in Civil Engineering from UIUC, and afterward he began doctoral studies. He has been involved in characterization, evaluation, and examination of hot



Secretary Slater congratulates Bill

mix asphalt concrete for highway and airport pavements, and with material testing, collection, and analysis of field data, and structural characterization of asphalt materials. He has also served as a supervisor to graduate and undergraduate studies at the Advanced Transportation Research and Engineering Laboratory.

Downey remarked that it is important for our transportation leaders of tomorrow to understand all the modes of transportation, to see the big picture, and to "know the right questions to ask." He stated that "Developments in transportation technology over the decades have caused the world to expand, not in dimension, but in terms of accessibility. Transportation has always played a major role in society. The degree of efficiency in getting people or goods from one point to another plays a pivotal role in determining the health of an economy and the general well-being of a nation."

Also speaking and presenting awards was Kelly S. Coyner, Administrator, RSPA. "It is the people who make the program," said Coyner. "Although there is more to be done, much has been accomplished particularly by these individuals who have already contributed to our transportation causes in a significant way."

Both speakers highlighted the need for a better educated and trained workforce and the urgent requirement for talented, forward looking individuals willing to take on the challenges of transportation.

Downey and Coyner commended the student award recipients for their dedication and ability to serve as a source of inspiration to lead the nation in providing a safe and efficient transportation system.

Military Testing At The Tech Center

Do you know that there is an Air Force officer officially assigned to the Tech Center? It wouldn't be surprising if the answer for most of you was no. Even most Air Force personnel don't know that the FAA reimburses the Air Force to fill approximately 40 positions FAA-wide, including a position in the Tech Center's Navigation Branch (ACT-360).

Unlike other Air Force personnel who may work closely with the FAA, "reimbursables" work for the FAA, typically for three years. Major Tom Mazaika is the current military liaison assigned to the Navigation Branch. "This position gives me a unique opportunity to see our government's navigation systems from the perspectives of both providers: DoT and DoD. When I attend meetings, or coordinate test efforts with the military, I represent the FAA. However, since I am truly part of both organizations, I have a vested interest in maximizing the results for both," explains Major Mazaika.

Because of the military reimbursable position, the Navigation Branch has been able to foster outstanding relationships with military test organizations. Some of the more recent projects include:

Developmental Test and Evaluation (DT&E) flight tests of DoD's Precision Landing System Receiver (PLSR) — The PLSR is a multi-mode receiver capable of providing guidance for VOR, ILS, MLS, and GPS approaches. The team flew over 85 flight test hours on the Tech Center's Convair 580 aircraft. Dean Joannou (ACT-360) coordinated all installation requirements, and Theos McKinney and Mark Ehrhart (ACT-370) acted as the primary flight test pilots. ACT-370's NIKE and Laser ranging facilities served as truth systems.

Initial Operational Test & Evaluation (OT&E) of the PLSR — The Air Force Operational Test and Evaluation Center performed tests on a C-17 aircraft staging from Edwards AFB, CA. Tom D'Ottavi (ACT-360) established GPS truth systems at three West Coast airfields to provide Time Space Positioning Information (TSPI). He also accompanied the team to Germany for testing at several military airfields.

Phase I support of FAA Wide Area Augmentation System (WAAS) OT&E — The 746th Test Squadron from Holloman AFB, NM, and the Air Force Flight Standards Agency used their C-21 (Lear 35) to fly WAAS (signal provided by National Satellite Test Bed) approaches. Mike Magrogan and Jim D'Ottavi (ACT-360) provided technical assistance in avionics set up and ACT-370's laser range provided truth source information. This test validated the 746th's WAAS avionics configuration, proved the accuracy of their prototype long-range GPS truth source, and confirmed their data collection system for upcoming OT&E of the operational WAAS.

Upcoming efforts include:

Final OT&E of the PLSR (to be accomplished later this spring) — The Air Force will deploy a C-17 aircraft to the Tech Center for two weeks and will fly to multiple sites along the east coast. Tom D'Ottavi, along with Mike Gehringer, SRC, will provide TSPI, and have already accomplished site surveys at six airfields. This final OT&E will allow the Air Force to install the PLSR in the entire C-17 inventory.

C-141 digital autopilot — The 339th Flight Test Squadron, Robins AFB, GA will test this new autopilot's autoland capability and Category II ILS performance using our ILS to simulate Category II approaches. ACT-370 will provide ramp support and NIKE radar/laser truth systems. ACT-73 will provide video support.

Joint Precision Approach and Landing System (JPALS) — ACT-360 personnel will continue to provide information/attend meetings for DoD's JPALS program. This evolving, differential GPS-based system will be interoperable with national and international civil systems. It will allow DoD and Civil Reserve Air Fleet (CRAF) aircraft to conduct precision approaches and landings in all mission environments under a wide range of meteorological conditions.

ITWS Dedicated

On December 9, personnel from the Technical Center, along with other FAA, Massachusetts Institute of Technology/Lincoln Laboratory, and Port Authority of New York/New Jersey dignitaries participated in a dedication ceremony for the Integrated Terminal Weather System (ITWS) New York Prototype at the Lincoln Laboratory Field Site in Garden City, NY. This prototype system serves Newark, LaGuardia, and John F. Kennedy International airports. ITWS situation displays (SD) are also located at Teterboro Airport, New York TRACON, Air Traffic Control System Command Center (ATCSCC) in Herndon, VA, and in the Traffic Management Units (TMUs) and Center Weather Service Units (CWSUs) at Boston, New York, and Washington Air Route Traffic Control Centers (ARTCCs).

ITWS is a terminal area weather system developed to provide an integrated set of safety and planning weather products to air traffic managers, supervisors, and pilots. ITWS will aid these users in maintaining and enhancing terminal area safety, and air traffic planning during periods of hazardous weather. Additional benefits include decreased user workload and common situational awareness between facilities.

The outputs from various FAA and National Weather Service sensors are processed by the ITWS and displayed as real-time products on SDs and ribbon display terminals (RBDT) in the tower, TRACON, and ARTCC in such a manner that they do not require meteorological interpretation. These outputs are obtained from some of the following systems: Terminal Doppler Weather Radar (TDWR), Airport Surveillance Radar (ASR-9), Next Generation Radar (NEXRAD), and Low Level Windshear Alert System (LLWAS).

The types of products that ITWS produces are: windshear and microburst detection and prediction, gust front detection and prediction, six level precipitation selectable out to 200nm, storm cell motion and extrapolated position, storm cell information (hail, mesocyclone, echo tops, lightning), and tornado detection.

Operational prototypes have been in operation at Orlando (since 1993), Memphis (since 1994), and

Dallas-Fort Worth (since 1995) International Airports. Raytheon Systems Company is under contract to incorporate the software algorithms developed by Lincoln Laboratory into First Article Systems, to be tested at the Technical Center, Kansas City International Airport, and Houston George Bush Intercontinental Airport starting in early 2000. Following successful Operational Test and Evaluation, the full production ITWS units will be installed at 34 TRACONs serving 46 major airports.

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to accommodate multiple test configurations of currently fielded systems and systems expected to be fielded prior to January 1, 2000. Field Site Testing involves a series of demonstrations of core NAS functional capabilities at the Denver Center, TRACON, Tower, and Denver International Airport facilities.

System Integrity Testing successfully ran on-schedule during the period of January 27-February 1, 1999, major emphasis being weather data processing with FAA and non-FAA participants. This test validated the collection and distribution of weather-related products internal and external to the NAS. External participants included the National Weather Service, Aviation Weather Node, USNSR, World Span, United Airlines, and Northwest Airlines. The leap-day rollover test (simulating the February 28, 2000 to February 29, 2000 rollover) was conducted on January 28, 1999. The "millennial" rollover test (simulating the December 31, 1999 to January 1, 2000 rollover) was conducted on January 31, 1999. All machines performed correct date rollovers and continued to operate normally, expected data was correctly exchanged between systems, no anomalies were found in any of the exchanged data, and background software involved in functions such as data ingest and bulletin generation ran flawlessly. The various data transmission logs from all participants are being exchanged for more detailed analysis.

(Continued on page 16)

Creating The Model Work Environment

The last issue of *Intercom* briefly mentioned the Model Work Environment Conference as one of last year's major Tech Center accomplishments. The motivational speakers, work sessions with fellow-employees, and other activities allowed employees to explore the many ways in which the Technical Center is diverse and rich in cultural, ethnic, and regional differences.

"The message of the Model Work Environment Conference echoes my commitment to a healthy, active workplace," explains Anne Harlan. "Remember, appreciating the wealth of our diversity is not only good business, it is good for our business. Also remember that we all have one thing in common, we are all different but still have many similarities. As we go about our daily activities we must remind ourselves that we are different and that we **MUST** take the time to understand these differences as we work together as a team."

To prove this commitment, ACT-1 holds monthly Employee Association Round Table Discussions with representatives from the Special Emphasis Programs, Employee Associations, Civil Rights Staff Manager, Diversity Manager, Union Officials, and members of the Management Team. The purpose of these discussions is to open communications and to discuss any areas of concern between the employee associations and the management team.

In addition, ACT managers encourage employees to attend conferences sponsored by the Hispanic and Black Coalitions, the Society for Black Engineers, National Training Conference on employment for Federal Employees who are deaf and hard of hearing, and the Technical Women's Organization. For example, Dot Buckanin (ACT-300), along with other managers, participated in recent sessions with the Technical Women's Organization to discuss opportunities and strategies for career development for women in the FAA.

Tech Center employees, the special emphasis programs, and employee associations actively seek ways to make a great place to work even better.

The Center's Federal Women's Program took an active role in developing a Center mentoring program. As reported in the last edition of *Intercom*, Theos McKinney, a member of the Center's Flight Test Team, facilitated the enactment of a historic flight by black aviators at the Center. Steve Beamer, our Disabilities Program Coordinator, has been working to locate colleges who have a representative number of students with disabilities to add to our outstanding list of schools in our co-op program. The Facility Services and Engineering Division (ACT-600) initiated an agreement with the Atlantic County vocational/technical schools allowing seven students from disadvantaged families to work in the Center's shops for 8 weeks during the summer. This was the first job for most of the students.

The Center currently employs people with disabilities and works hard to make their environment a safe and efficient workplace. Disability awareness training has been provided to managers and the Center sponsored basic and intermediate Sign Language classes, as well as sponsored a Hireability Regional Meeting.

We took the agency's Back to Work Program seriously and hired 1 part-time and 3 full-time employees through the program. These employees have improved their skills, knowledges and abilities to the point that all the full-time employees have received promotions. We here at the Center are proud of our efforts in this arena. Our representative on the agency's Back to Work Program team, Judy McMillen, has done an outstanding job -- one that earned Gore's Hammer Award.

Our Diversity Program is well known throughout the Center and Headquarters. Our diversity manager, Rodger Mingo, is committed to making a difference. He leads a Diversity Counsel, sponsoring many events; holds management team diversity programs twice a month; provides diversity awareness training; and supports all divisions at the Center, as well as headquarters' organizations, when requested.

To assure that employees and managers have an understanding of "what is sexual harassment," everyone was required to view videos on

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"Preventing Sexual Harassment." Managers were also responsible for obtaining instructions on the "Sexual Harassment Accountability Board" program. To ensure the rights of all, employees volunteer to be EEO Counselors. This is a collateral duty, requiring dedication to their job while performing this added responsibility. To assist them with this collateral duty, the Center provides training to give them the tools needed to be good counselors.

The Community Outreach Program is working to raise awareness about the Tech Center and explore the potential of community partnership efforts. Center employees give it life by encouraging employees to participate in volunteer opportunities associated with the program. Our community encompasses employees, students, corporations, educational school systems/institutions, aviation users, organizations, leaders, the business community, and the general public.

For example, this past year we established an Alternate Dispute Resolution Mentor Program with Rittenberg School, grades 6, 7, and 8. Through this program, Tech Center mediators will provide advice and guidance to student mediators. The Center has also developed a marketing tape in Spanish that will be shared with the Human Resource Division to be used in recruitment trips, the visitor programs for international tours, and with programs at the local schools.

Center managers are working hard to understand the new ARA Personnel Reform Program. They faithfully attend training and working sessions. We continue to partner with our unions, attend partnership training/building sessions, with both sides trying to understand the differences between union and management philosophy. We are working hard to keep pace with the new technology and way of doing business.

It is clear that the key to our success is communication and involvement. If possible, get involved ***-it takes all of us to create the model work environment.***

AAR-500 Reorganizes

The Aviation Security Research and Development Division (AAR-500) has grown considerably in mission and scope since its creation in 1990. To help meet its increasing responsibilities, the division recently reorganized.

This reorganization was needed for several reasons. First, with the large number of detection systems now being deployed by the Security Equipment Integrated Product Team (SEIPT), it was necessary to develop a smoother transition from the laboratory to the field. This called for a stronger integration effort as well as better ways to insure fielded systems perform up to expectation.

Second, the Aviation Security Lab is now a complex with the addition of 2 buildings for luggage storage, additional test and evaluation space plus an increase in explosives magazine capacity. Managing the physical plant and the development of plans for additional test facilities required a new focus.

Third, the future deployment of detection systems will be according to vector, i.e., the way threats can be introduced aboard aircraft. These include checked and carry-on bags, personnel, and cargo. In addition, the division wanted a means to implement better the coaching and feedback that is needed to make the new FAA Personal Management system a success. At present there are 47 employees in the division, although 8 have been detailed to the Security Equipment Integrated Product Team.

Paul Polski, the Division Manager, heads the newly re-defined organization with the following under his direct control: safety committee, certification, and event tracking.

AAR-510 is the new Technology Integration Branch, with a manager still to be named. It will include human factors, airport security technology integration, technology transition, and the National Safe Skies Alliance Program (NSSA).

Dr. Susan Hallowell heads AAR-520, the System Development and Vector R&D Branch. This includes the vectors of checked bags, carry-on bags, personnel screening, and the bulk and trace technology development programs.

Mr. Paul Jankowski heads the new Planning and Requirements Branch, AAR-530, which includes budget and long term planning, requirements tracking, the information control center, cargo/mail vector, aircraft hardening, and partnering.

Mr. Ken Novakoff now heads the new Laboratory Infrastructure Branch, AAR-540, which includes the management of the Aviation Security Laboratory Complex, the new Security Operations Center, coordination of facility activities, maintenance of the Baggage Tracking Database, tours, safety, and access control.

New Ground Radar Enhancement Tests to Improve Safety

ACT-310 personnel, Joe Longo (Test Lead), Chuck Dudas, Henry Dorsey, Dave Van Nostrand, Aaron Reed, and Jeffery Livings (Technical Program Manager), are currently performing development tests of the new Airport Movement Area Safety System (AMASS), which will improve margins of safety through enhanced ground aircraft/vehicles/obstacles' surveillance and separation in, and around, airport runways and tarmacs.

The AMASS system will

provide automatic conflict alerts (both aural and text) to assist tower controllers in reducing runway accidents. The system will also provide alerts involving possible conflicts of aircraft on the runway and on the close approach path with other aircraft/vehicles/obstacles on or near the runway.

The FAA selected the Norden Company to manufacture and install one prototype AMASS at the San Francisco International Airport, three full-scale development systems for the purpose of a phased development and testing program, and after successful test completion, thirty-seven production units.

The factory development tests, consisting of 27 separate tests with field tests to follow, are planned through March, and are currently 74% complete or in-process, and 26% incomplete, consisting of remaining tests, or re-testing due to prior failure. The post-development period Operational Tests must then be performed successfully on the three Full-Scale Development Systems as a preliminary criteria to Independent Operational Test and Evaluation (IOT&E) validation, prior to commissioning of the production systems which follow.

Who is this Manager?

Richard Neuman
Civil Rights Manager



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The formal Operational Demonstration was performed February 3, 1999, utilizing non-operational FAA laboratories at the WJHTC, MMAC and MCI LINCOS labs. Among those to witness the demonstration were: Ray Long (AOA-4), Steve Zaidman (ARA-1), Anne Harlan (ACT-1), Teresa Hudson (AOS-2), Bob Scarbrough (AAF-6), Christopher Garcia (AAF-6), Bruce Singer (ACT-2), Ron Esposito (ACT-3), Dave Ford (AUA-300), Steve Holiday, Phil DeGonzague (IG), Sheila Smallwood (ACT-201), and Dennis Filler (ACT-500).

The Operational Demonstration was conducted in a large-scale, multi-system environment emulating the Oakland ARTCC and oceanic airspace out to Honolulu Micro-EARTS. The test environment contained all major, and most peripheral, component systems of the NAS En Route, Oceanic, Flight Service/Weather and Terminal Domains. Flight Data Processing, Weather, Live Radar, Voice Communications, and Data Communications were demonstrated with system clocks set forward to December 31, 1999, and allowed to roll over to January 1, 2000. Radar data, configured as the Oakland control area, was used by the WJHTC Target Generation Facility to generate target reports in real-time to adapt four radars for ZOA, two for Bay TRACON and one for Monterey ARTS IIA. Western Pacific region controllers from the Oakland En Route and Oceanic facilities, Bay TRACON, and Monterey ARTSII verified proper operation of the systems. A NAS Operations Manager from ZOA also participated in the test effort.

The Operational Demonstration was very successful. No Y2K related problems have been identified in any of the ETE testing conducted to date. Several minor problem reports were generated to document HW glitches.

Though this multiple lab connection is quite an achievement from a technical standpoint, another benefit derived from the rigors of this ordeal is the creation of meaningful working relationships between the test participants. These relationships, in turn, are resulting in an esprit de corps among the technicians, specialists, managers, and all the other associates of this massive project at the

Technical Center, Aeronautical Center, Headquarters, and field facilities. Partnerships have been developed among Air Traffic, Airway Facilities, Technical Center, AOS, AOP divisions, and contract support from SRC, Raytheon, RMS, AS&T, E&I, TRW, MCI, DI, DISC, and SEMCOR. In addition, the external stakeholders, such as MCI/World Com, The National Weather Service, World Span, and the Aviation Weather Node, have also been impressed with the spirit of cooperation which is becoming the trademark of this project.

William J. Hughes Technical Center
Intercom

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